under the NREP during 1989-90, 1990-91, 1991-92, 1992-93 anj 1993-94;

(b) the targets set for 1994-95; and

(c) the steps taken to achieve the targets?

THE MINISTER OF STATE IN THE MINISTRY OF RURAL DEVELOP MENT (DEPARTMENT OF RURAL DEVELOPMENT) (SHRI &AMESH-WAR THAKUR): (a) The National Raral Employment Programme (NREP) was discontinued in 1989-90. It was merged alongwith the Rural Landless Employment Guarantee Programme (RLEGP) into Jawahar Rozgar Yojana (JRY) w.e.f. 1.4.1989. The State-wise details of employment generation targets lived and the achievements made under JRY during 1989-90 to 1993-94 are given in Annexure. (See Appendix 172 Annexure No. 33)

<h) The employment generation tar gets fixed under JRY for 1994-95 are given in Annexure. (See Appendix 172 Annexure No. 33)

(c) For achievement of tagets fixed under JRY, its implementation is monitored regularly at the Central, State, District as well as at the Village Pan-chayat level.

Committee on earthquake predictions

1477. SHRI GOVINDRAO ADDC: Will the PRIME MINISTER be pleased tate:

(a) what is the Composition and terms of reference of the expert committee set up by Government in 1987 on! earthquake predictions;

(b) whether the Committee has submitted its report to Government;

(c) if so, the details of the recommendations made; and

(d) whether the recommendations have been accepted by Government. If not, the reasons therefor?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND MINISTER OF STATE IN THE DE PARTMENTS Ob ATOMIC ENERGY, SPACE AND IN THE MINISTRY OF SCIENCE AND TECHNOLOGY {SHRI UHUVNESH CHATURVEDI): (a) to (d) The Department of Science and Technology had set up a Committee of Experts i" 19S6 to formulate a comprehensive 5-10 year profile for seismological studies in India.

Composition', Prof, A. S. Arya, Department of Earthquake Engineering, University of Roorkee, Roorkee—da rman; (ii) Major General G. C. Agarwal, Surveyor General, Survey of India, Dehradun: (iji) Dr. H. N. Srivastava, Director (Seismology), India Meteorology Department, New Delhi; (iv) Dr. K. K. Gupta. Director, Centre for Earth Sciences Studies, Trivendrum; (v) Shri F. L. Narula, Director, Land Slides and Sei>motefl(tonics(Divislonl Lucknow (for GSI, Calcutta) and (vi) Dr. G. D. Gupta, Sr. Scientific Officer, DST, New Delhi.

Terms of Reference: The terms of reference sought the guidance of the Committee on (i) measures for strengthening the observational network in the country; (ii) suitable measures for improving the design codes and construction practices, (Hi) identification of programmes and methods for organising disaster preparedness; (iv) organisational linkages; nnd (v) programmes for manpower development.

The Committee submitted its report io DST in 1987. Major recommend*-tions include: (i) Continued support and strengthening of earthquake studies at various institutions; (ii) Setting tip two regional centres; (iii) Setting up of an Earthquake Advisory Council and National Earthquake Information Service.

DST i-, taking follow-up uciion in phases. The Himalayan Seismicity programme evolved by DST has been streng-thed by addition of new observatories and strong motion arrays. At present the system consists of 38 observatories *in* the North-West Himalaya and more than 150 strong motion accelerographs. These instruments have generated some ffligue data sets in the last few years, fhe seismologieal activities in IMD have also been enlarged. A computerised data base has been set up. A major proposal for seismologieal instrumentation upgradation in the peninsular shield has recently been framed for which the World Bank has indicated its support. \n International Advisory Committee has been constituted to oversee the execution of this project.

Research in food production

1478. SHRI JAGMOHAN: Will the PRIME MINISTER be pleased to state:

(a) what research work has been done or is being done by the Department of Biotechnology to achieve a quantum jump in food production in India in view of the emerging demands, and

(b) whether Government propose to make more investment in this Department lo strengthen it and to enhance is poes-* rial for achieveving a breakthrough in biotechnology in the matter of food production?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND THE MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE AND MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI): (a) The Department of Biotechnology has supported R and D projecis in the areas of crop biotechnology, biofertilizers, biological pest control, embryo transfer technology and aquaculture. Major crops like rice, wheat, rape-seed and mustard, chickpea and other pulses have been taken up for genetic improvement. Promoting high vielding selections in mustard, and of kesari dal with very low amount of neurotoxin are in advance stages of field trials. Methods for introducing single gences into some of these crops have been standardized. *In* horticultural crops such as banana, and strawherfy, tissue cultured planting material is available commercially. The use of biopesticides and biofertilizers arc being promoted. Embryo transfer tech" nology for herd improvement in cow* and buffalc have been standardized. Over five hundred calves have been produced using this technique. This would help in rapid genetic improvement for milk and meat production. Demonstrations' for semi-intensive prawn and carp cultures have shown productivity levels of over 15 tonnes per hectare per annum.

(b) Depending upon the availability of funds, the Government would like to invest in high tech biotechnology programmes to increase food production and to prevent post-harvest losses. Under a New Task Force on Footl Biotechnology projects for producing value added products, wmshroom cultivation and f°°d colourants have also been initiated. These research efforts aim at enhancing the food production using the biotech-nological tools.

Schemes! to contain Brain Drain

1479. SHRI VIRKN J. SHAH: SHRI IQBAL SINGH:

Will the PRIME MINISTER be pleased to state;

(a) what has been the annual outgo of scientists, engineers, medical person nel and technologists during each of the last five years;

(b) what are the reasons for this brain drain;

(c) whether any study has been conducted to estimate the economic loss to the ciuntry because of this brain drain: if so, what are the results of sue a study;

(d) what are the details of the efforts made and schemes launched by Govem-ment to attract Indian scientist whoi